GRANITE REEF FCD GAGE ID# 4568

STATION DESCRIPTION

<u>LOCATION</u> - The gage is located approximately 1/2 mile southeast of Granite Reef Dam in the outlet channel from Spookhill FRS, along Bush Highway. Latitude 33° 30' 43.0" North; Longitude 111° 41' 1.9" West. Located in S18 T2N R7E, in the Granite Reef Dam 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on July 21, 2005.

DRAINAGE AREA – Not determined

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.55 feet, levels of October 31, 2005. The PT is on the left bank of the channel.

There are no crest-stage gages at this site.

There is one staff gage at this site. It is located opposite of the pressure transducer at the outlet of the Bush Highway culvert.

ZERO GAGE HEIGHT – Zero gage height is defined as the zero elevation of the staff gage.

HISTORY – Gaging established on July 21, 2005. No previous gaging history at this location.

REFERENCE MARKS

RP-1 is the lip of the cap of the pressure transducer housing. Elevation 0.59 feet gage height, levels of October 31, 2005.

The staff gage elevations are also useable as references. Elevations are in gage height.

<u>CHANNEL AND CONTROL</u> - The channel is concrete bottom with vertical concrete walls. The channel bottom is covered somewhat with sand and cobbles.

The control for the channel is the channel at levels above about one foot gage height.

RATING - The current rating is Rating #1, dated July 21, 2005. The rating was created by running the USGS SAC program for various levels between the two surveyed cross sections. Water surface elevations used were assumed to be level based on the channel slope.

<u>DISCHARGE MEASUREMENTS</u> - Direct measurements would be difficult at the gage because access is unavailable. Direct measurements could be obtained at the end of channel/beginning of sediment basin downstream. Indirect measurements would be difficult given the unlikelihood of high water marks being left on the vertical concrete sides.

<u>POINT OF ZERO FLOW</u> - The low point in the gage cross section of the channel was found at -0.45 feet gage height, levels of October 31, 2005.

FLOODS – None recorded since installation.

<u>REGULATION</u> - Spookhill FRS regulates flows into the outlet channel.

DIVERSIONS - None known

ACCURACY - Fair

<u>JUSTIFICATION</u> - Monitor flows into the sediment basin and ultimately into Granite Reef diversion dam.

<u>UPDATED</u> - July 18, 2011

DE Gardner